

**ABSTRACT**

Apparatus (20) is provided for applying current to a nerve (30). A cathode (40) is adapted to be placed in a vicinity of a cathodic longitudinal site of the nerve (30) and to apply a cathodic current to the nerve (30). A primary inhibiting anode (42) is adapted to be placed in a vicinity of a primary anodal longitudinal site of the nerve (30) and to apply a primary anodal current to the nerve (30). A secondary inhibiting anode (44) is adapted to be placed in a vicinity of a secondary anodal longitudinal site of the nerve (30) and to apply a secondary anodal current to the nerve (30), the secondary anodal longitudinal site being closer to the primary anodal longitudinal site than to the cathodic longitudinal site.